



Energy Resources
Conservation Board

640 Fifth Avenue SW
Calgary, Alberta
Canada T2P 3G4

Informational Letter

IL 90-1

31 January 1990

CANADIANA

FEB - 7 1990

To: All Oil and Gas Operators/Interested Parties

REVISED PROCEDURES FOR ALLOWABLE RECORDS OVERPRODUCTION PENALTY GAS CREDITS

In order to simplify current procedures and ensure equitable administration of oil production allowable controls, operators should note the following revisions to calculating allowable records. Further to items listed in IL 87-9, and effective 1 March 1990:

1. The 20 per cent cumulative overproduction penalty, applied where the status of a production entity is more than 10 per cent of the penalized MRL for 3 consecutive months, will not be applied provided that the entity has underproduced or is shut in for the month in question.
2. For pools subject to gas-oil ratio penalty relief on the basis of net gas production, lease fuel will now also be considered as gathered gas in the calculation of GOR penalties. Net gas production is defined in clause 1 of the MRL Order as gross gas production minus gas delivered to an approved gas gathering system.

Operators who may benefit from these changes should notify the Accounting Department (297-8354) to ensure appropriate adjustments are made to Allowable records. To support these and other modifications to the Allowable system, an updated Allowables Handbook summarizing all current procedures is planned for release by mid-1990.

A handwritten signature in black ink, appearing to read "R. T. Bording", is written over the typed name and title.

R. T. Bording
Manager
Accounting



Digitized by the Internet Archive
in 2015

<https://archive.org/details/energyresources199013>

**Energy Resources
Conservation Board**

640 Fifth Avenue SW
Calgary, Alberta
Canada T2P 3G4

Informational Letter

IL 90-2

TO: ALL OIL AND GAS OPERATORS

2 April 1990

PRODUCTION SURVEILLANCE PROGRAMS

The Energy Resources Conservation Board (Board) is responsible for ensuring that oil and gas production is accurately measured and reported as required by the Oil and Gas Conservation Act (Act) and the Oil and Gas Conservation Regulations (Regulations). The Alberta Department of Energy (Alberta Energy) is responsible for the collection of oil and gas royalties and, in doing so, relies on the accuracy of production data obtained from the Board.

To ensure that reported production data is reliable and accurate, the Board has implemented a number of new production surveillance programs and enhanced others already in place. It has added a program to review proration well test procedures and another to monitor the proving of live test oil meters. In addition, the Board has increased its capacity to review the overall operations at a multi-well battery, to investigate situations where the possibility of theft or misallocation of oil is identified, and to conduct more frequent and comprehensive routine inspections of the production facilities in the Province.

The purpose of this informational letter is to briefly describe the programs and to provide an update on the program results.

WELL TEST VERIFICATION PROGRAM

The Board's Interim Directive ID 88-4 introduced and outlined the Well Test Verification Program. In the case of oil proration batteries, commingling of well production prior to measurement is permitted in accordance with section 84 of the Act and section 10.330 of the Regulations. Production volumes are prorated to individual wells from total battery production, based on individual well tests conducted in accordance with section 7.030 of the Regulations. Accurate allocation of production to individual wells is dependent on accurate testing and accounting procedures.

The Board presently has staff conducting in-depth reviews of proration well test data. Battery reports are requested for a given month and, upon receipt, are reviewed for the calculation of estimated production, well test frequency and duration, production hours, and other related items. The facilities to be reviewed are selected from all active operators of proration batteries in the Province. The program will attempt to check each operator a minimum of twice per year. Operators with a large number of batteries may expect to have several under review at any given time.

During 1989 over 300 proration battery reviews were completed. These reviews included production from over 4000 wells and represented 760 000 m³/month of oil production. Approximately 93 per cent of the reviews revealed some type of deficiency ranging from minor clerical problems to major procedural errors. Amended production reports were required for 55 per cent of the reviews. While many of the amendments involved relatively small changes in allocated production, the allocation to 5 per cent of the wells was adjusted by greater than 25 per cent.

The results gathered to date confirm the need for this program and the quality control it provides. Accordingly, the Board intends to continue with the Well Test Verification Program in its present format; however, it will monitor the program on a continuous basis and make adjustments as required. The Board welcomes any suggestions or comments respecting this program.

TEST OIL METER PROVING PROGRAM

In Interim Directive ID 88-3, the Board introduced a new program of performance monitoring of live test oil meter proving. Test oil meters at oil proration batteries are the basis of well production allocation and subsequent royalty and working interest owner allocations. Board staff conduct one or more calibration runs on the meter to verify the meter factor provided by the meter proving company. If the meter factors differ by more than 2 per cent the operator and proving company are advised and requested to re-prove the meter. The meter proving program was initiated in September 1989, and only limited data is available at this time. The Test Oil Meter Proving Program will continue through 1990 with future direction of the program contingent on program results.

PRODUCTION AUDIT PROGRAM

Under its mandate to ensure accurate measurement, the Board also reviews overall battery operations, procedures, and record keeping for the purpose of ensuring compliance with regulations and policies. In the past "Detailed Inspections" and "Production Practices and Records Checks" were conducted primarily by inspectors in the Board's area offices.

In 1985, and again in 1989, the Production Audit Program was expanded with the addition of staff in the Board's Calgary head office. Under this program, staff conduct facility audits consisting of an inspection of the battery facilities and operator procedures. They then conduct a detailed review of the pertinent production and engineering data and reports used to determine total battery production and allocated well production.

More than 200 batteries are randomly selected each year from a total of approximately 1400 oil proration batteries in the Province. The sample size is considered large enough to be statistically representative of the overall performance on a province-wide basis. Because of the random selection process necessary for subsequent statistical analysis and extrapolation, it is possible that a particular facility will be selected for audit in consecutive years. In addition to the random selection process, a facility may be selected for audit based on operator performance, previous audits or well test verification reviews, and/or recommendations from government agencies or other Board departments.

A total of 182 audits were completed in 1989. Of these, 178 identified at least one deficiency in the operating or production reporting procedures. The deficiencies range from minor clerical errors to improper well testing, measurement, and/or production accounting procedures. Amended production reports were required in 98 cases. Similar to the Well Test Verification Program, the majority involved relatively small changes; however, some resulted in significant changes in allocated production.

The Production Audit Program will be maintained at its present level in the near term. As more data is obtained, the scope and direction of the program may be adjusted. Again, the Board welcomes any suggestions or comments respecting this program.

PRODUCTION LOSS PROGRAM

The purpose of this program is to investigate situations where the possibility of theft or loss of oil is identified or where misallocation of oil to wells may result in avoidance of royalty payments. The Production Loss staff review production records and operator procedures but can also consider reported well production as it relates to the potential of the reservoir and/or well completion. It is often necessary for the staff to work closely with industry, Alberta Energy, and law enforcement agencies.

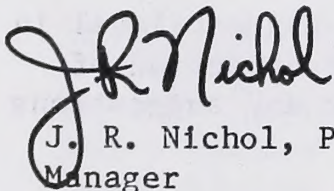
FIELD INSPECTION PROGRAM

The Board's area office staff also play a direct role in the overall production surveillance program, particularly in the area of routine inspection of production and measurement equipment, as well as environmental compliance. This role was increased in mid-1989 with the addition of four new inspectors to the program. In addition, the area office staff continue to conduct production facility audits. The selection of these facilities is based on historical operator performance and the results of the routine inspection program.

CONCLUSIONS

Based on the results to date, the Board believes that the aforementioned programs are necessary for monitoring the accuracy of oil and gas measurement and reporting. As demonstrated by the deficiencies revealed by the Well Test Verification Program and the Production Audit Program, the reliability of reported data is, in many cases, less than desirable and, in some cases, unacceptable. The Board believes that the continuation of these programs will be advantageous not only to the Board and Alberta Energy, but also to industry in confirming the reliability of the data submitted to and disseminated by the Board.

Any questions regarding the above programs may be directed to the Production Section of the Board's Drilling and Production Department at 297-8132 or 297-8448.



J. R. Nichol, P.Eng.
Manager

Drilling and Production Department

APR 18 1990



Energy Resources
Conservation Board

640 Fifth Avenue SW
Calgary, Alberta
Canada T2P 3G4

Informational Letter

IL 90-3

TO: All Oil and Gas Operators

5 April 1990

APPLICATIONS FOR SPECIAL MRLs, GPP, AND GOR PENALTY RELIEF

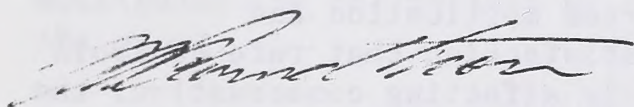
This informational letter is intended to clarify and update industry on the Board's policy with regard to the responsibility of the applicant and other operators in a pool when dealing with applications for special Maximum Rate Limitations (MRLs), Good Production Practice (GPP), and gas-oil ratio (GOR) penalty relief. The attached appendix provides a brief overview of procedures and administrative practices related to MRLs and the GOR penalty base. The Board expects that the measures outlined herein will assist in more timely and orderly disposition of these types of applications.

When an operator files a technically supported application and successfully demonstrates to the Board's satisfaction that rate controls for the pool can be relaxed without adversely affecting conservation, the Board would be prepared to approve the application in the absence of an acceptable intervention. The Board currently requests that the applicant seek the concurrence of other operators in the pool with regard to the proposed depletion plan. The primary purpose of this contact is to provide other parties in the pool with an opportunity to identify any serious conservation or equity issues. Where a competitive operator has nothing to gain or less to gain than the applicant, experience has shown that concurrence is often difficult to obtain and that serious delays can result. A common example of this nature would be where the applicant has better wellbore deliverability and/or wells that are in a favourable structural position relative to other wells in the pool.

It is normally required that applications of this nature be submitted on a pool basis. Therefore, it is important that operators within a pool continue to discuss pool performance and seek general consensus as to the optimum depletion strategy for the pool. To provide potentially affected parties with the opportunity to address any serious conservation or equity concerns, it is requested that the applicant provide all operators in the pool with a copy of such applications and that the applicant attempt to initiate meaningful discussions with these operators.

The Board in turn expects that any concerned operator will file a thoroughly documented intervention in a timely fashion, generally within 30 days of receiving a copy of the application. In disposing of the application the Board will either approve the application based on the information presented or send formal notice or a letter with a response deadline to the other operator(s) in the pool. In determining the need for such notice, the Board would exercise considerable discretion having regard for the documented efforts taken by the applicant to establish the position of other operators in the pool and the Board's own knowledge of the pool. The Board emphasizes that an intervention based solely on the type of arguments noted in the second paragraph above would not be considered an acceptable equity objection and in such cases, the Board would likely rule on the application without further consultation. A successful intervention would require strong technical and/or equity reasons why the proposal should not be approved. Fully substantiated arguments are required to assist the Board in making the appropriate ruling.

Any questions with regard to this matter can be directed to the Oil Department at 297-8570.



N. G. Berndtsson, P.Eng.
Manager, Oil Department

APPENDIX TO IL 90-3

Procedures and Administrative Practices for MRLs and GOR Penalty Base

As a result of revisions to the Modified Proration Plan outlined in Informational Letters IL 89-8 and IL 89-9, effective 1 October 1989 the Board replaced the IP Order with an MRL Order. Details of the MRL Order are discussed in Informational Letter IL 89-11. Under the current market regime where demand exceeds available supply and adequate pipeline capacity exists to access markets, MRLs assigned for conservation purposes are the major factor in controlling pool/well withdrawal rates.

The broad objectives of conservation controls, such as MRL and GOR penalty provisions, are to prevent waste and achieve the best technical economic recovery, along with an orderly development, of hydrocarbon resources.

As an initial administrative step the Board assigns an MRL to new pools using the greater of the reserve-based Preliminary Rate Limitation (PRL) formula or the summation of the Basic Well Rates (BWRs). In some cases the Board may use regional knowledge rather than the reserve-base approach where it is quite clear that, directly or by analogy, such knowledge can and should be applied. With the proviso that all wells are entitled to a minimum base MRL equal to the BWR, the pool rate so determined is distributed to wells based on productive area*, with GOR and off-target penalty factors applied thereafter. There is no redistribution of the MRL for well incapability. Although the MRL primarily serves as a conservation control, it may also provide a measure of equity protection, particularly early in the life of a pool.

The preliminary MRL is intended to be an interim conservation control until more detailed studies can be conducted. As performance information becomes available the Board encourages operators to submit technically supported applications for more appropriate MRLs, including GPP. In keeping with the above-stated broad conservation objectives, the technical considerations should go beyond reserves assessments by addressing factors that demonstrate how the proposed production rates or depletion plans will contribute to achieving those objectives. Within a competitively operated pool the Board would strive to ensure that all wells have equal opportunity. Accordingly, a special MRL or GPP would normally be approved on a pool basis and applied consistently to all wells.

* In pools with mixed spacing (DSU sizes) or other unique situations, this practice may require modification.

In order to make efficient use of reservoir energy and prevent the waste of solution gas through flaring, a GOR penalty base is placed on each new pool. The Board in Informational Letter IL 89-14 provided an overview of the criteria that should be considered when submitting an application for GOR penalty relief or changes to the GOR penalty base. When adequate information is available such that facility requirements and other conservation issues can be addressed, the Board encourages submission of applications for GOR penalty relief.